

REPORT ON THE  
FIFTY-SIXTH ACTUARIAL VALUATION  
OF THE STATE TEACHERS'  
RETIREMENT SYSTEM OF VERMONT  
PREPARED AS OF JUNE 30, 2003

OCTOBER 23, 2003

October 23, 2003

Board of Trustees  
State Teachers' Retirement System  
of Vermont  
Montpelier, Vermont 05633

Dear Board Members:

Section 1942, subsection (n), of Title 16, Chapter 55, Vermont Statutes Annotated, relating to the State Teachers' Retirement System of Vermont, provides in part that the actuary shall make annual valuations of the system.

The fifty-sixth actuarial valuation of the system, prepared as of June 30, 2003, has now been completed and the results are presented in this report, together with our recommendations in regard to contributions payable by the State.

On the basis of the current valuation, we recommend that a normal contribution of 6.83% of covered compensation and a payment of \$11,795,554 towards the liquidation of the unfunded accrued liability be made. Based on the reported payroll, the total contribution amounts to \$41,658,946 for the year beginning July 1, 2003. Schedule G provides the estimated contributions for the following two fiscal years.

The Table of Contents, which immediately follows, outlines the material contained in this report.

Respectfully submitted,

David L. Driscoll, F.S.A., E.A.  
Associate Principal and Consulting Actuary

## TABLE OF CONTENTS

| <u>SECTION</u>   | <u>Page</u> |
|--|-------------|
| I Summary of Principal Results.....  | 1           |
| II Member Data .....   | 3           |
| III Assets .....   | 6           |
| IV Comments on Valuation.....  | 7           |
| V Contributions Payable Under the System .....   | 8           |
| VI Experience.....   | 9           |
| VII Accounting Information .....   | 12          |
| <br><u>SCHEDULE</u>  |             |
| A Valuation Balance Sheet.....   | 14          |
| B Outline of Actuarial Assumptions and Methods.....  | 17          |
| C Brief Summary of Principal Plan Provisions<br>as Interpreted for Valuation Purposes..... | 23          |
| D Summary Tables of Member Data as of June 30, 2003 .....                                  | 27          |
| E Amortization Schedule for the Unfunded Actuarial Accrued Liability.....                  | 33          |
| F Projected Benefit Payouts and Contributions.....   | 35          |
| G Projection of Contributions for Following Two Fiscal Years .....                         | 37          |

REPORT ON THE FIFTY-SIXTH ACTUARIAL VALUATION OF THE  
STATE TEACHERS' RETIREMENT SYSTEM OF VERMONT  
PREPARED AS OF JUNE 30, 2003

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below:

| Valuation Date                                  | June 30, 2003   | June 30, 2002   |
|---|-----------------|-----------------|
| Active members                                  |                 |                 |
| Vested  | 7,546           | 7,408           |
| Not vested                                      | <u>2,809</u>    | <u>2,849</u>    |
| Total   | 10,355          | 10,257          |
| Compensation                                    | \$437,238,543   | \$418,904,021   |
| Average age                                     | 45.41           | 44.53           |
| Average service                                 | 12.46           | 12.37           |
| Average compensation                            | \$42,225        | \$40,841        |
| Retired members and beneficiaries               |                 |                 |
| Number  | 4,169           | 3,991           |
| Annual retirement allowances                    | \$50,540,997    | \$46,774,212    |
| Inactive members                                | 2,901           | 2,932           |
| Terminated vested members                       | 583             | 513             |
| Adjusted assets for valuation                   | \$1,218,000,794 | \$1,169,293,733 |
| Unfunded actuarial accrued liability            | \$140,821,352   | \$137,907,804   |
| Annual actuarial accrued liability contribution | \$11,795,554    | \$11,356,088    |
| Normal contribution rate                        | 6.83%           | 4.04%           |

2. Comments on the results of the valuation are given in Section IV and further discussion of the contribution levels is set out in Section V.
2. The actuarial assumptions have been changed in several respects from those used in the last valuation of the System:
  - Assumed probabilities of withdrawal, retirement and disability have been changed to more closely match the observed experience of the System.
  - The assumed rates of salary increase have been raised at various ages and lowered at others. This change, too, has been made for the purpose of bringing assumptions more closely in line with the observed experience of the System.
  - Assumed annual cost-of-living adjustments to retirees' benefits have been lowered from 4.0% (for those whose benefit increases are determined on the basis of the full annual increase in the Consumer Price Index) and 2.0% (for those whose benefits are increased by one-half of the year-to-year increase in the Consumer Price Index) to 3.0% and 1.5%, respectively.
  - The assumed interest rate has been lowered from 8.5% to 8.0%.
  - Finally, the mortality tables applied to healthy retired lives have been changed from the unrated 1995 Buck Mortality Tables for Males and Females to the same tables set back one year. The mortality tables applied to disabled retired lives have been changed to the RP-2000 Mortality Tables for Disabled Lives.

Schedule B outlines the full set of actuarial assumptions and methods employed in the current valuation. The recommended State contribution to the System for fiscal year 2004 is

approximately \$6.6 million dollars higher than it would have been had the actuarial assumptions remained unchanged from those used last year. The unfunded liability of the System rose by \$3.03 million as a consequence of the changes in actuarial assumptions.

4. Schedule C outlines the benefit provisions that were taken into account in the valuation.
5. As part of the regular valuation, experience of the system during the previous year has been analyzed. We have summarized in graph form in Section VI experience during the past year.
6. Schedule F shows a graph of projected benefit payouts during the next ten years of benefits payable to current and future pensioners.
7. Schedule G shows projected contributions for the two following fiscal years.

## SECTION II - MEMBER DATA

1. Member data were furnished by the Retirement Division of the State Treasurer's Office.
2. Schedule D presents tables that summarize active members, by age and service and service pensioners, disability pensioners and beneficiaries by annual benefit levels.

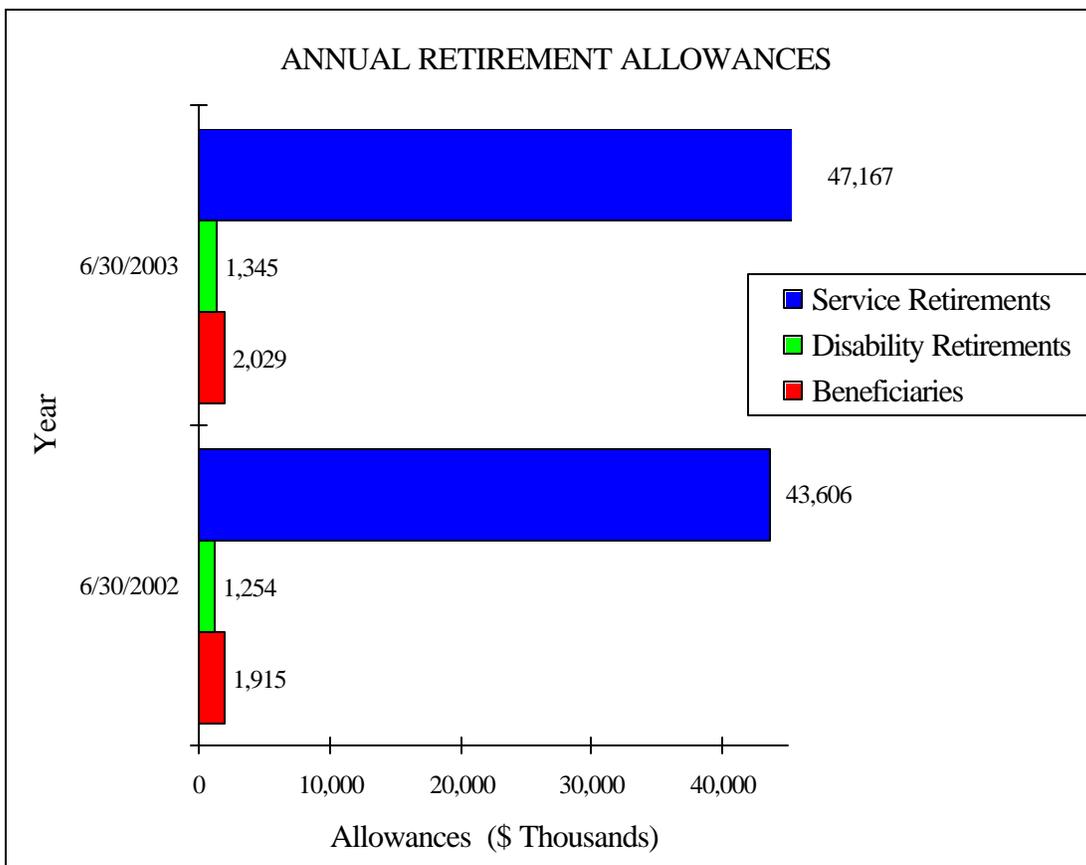
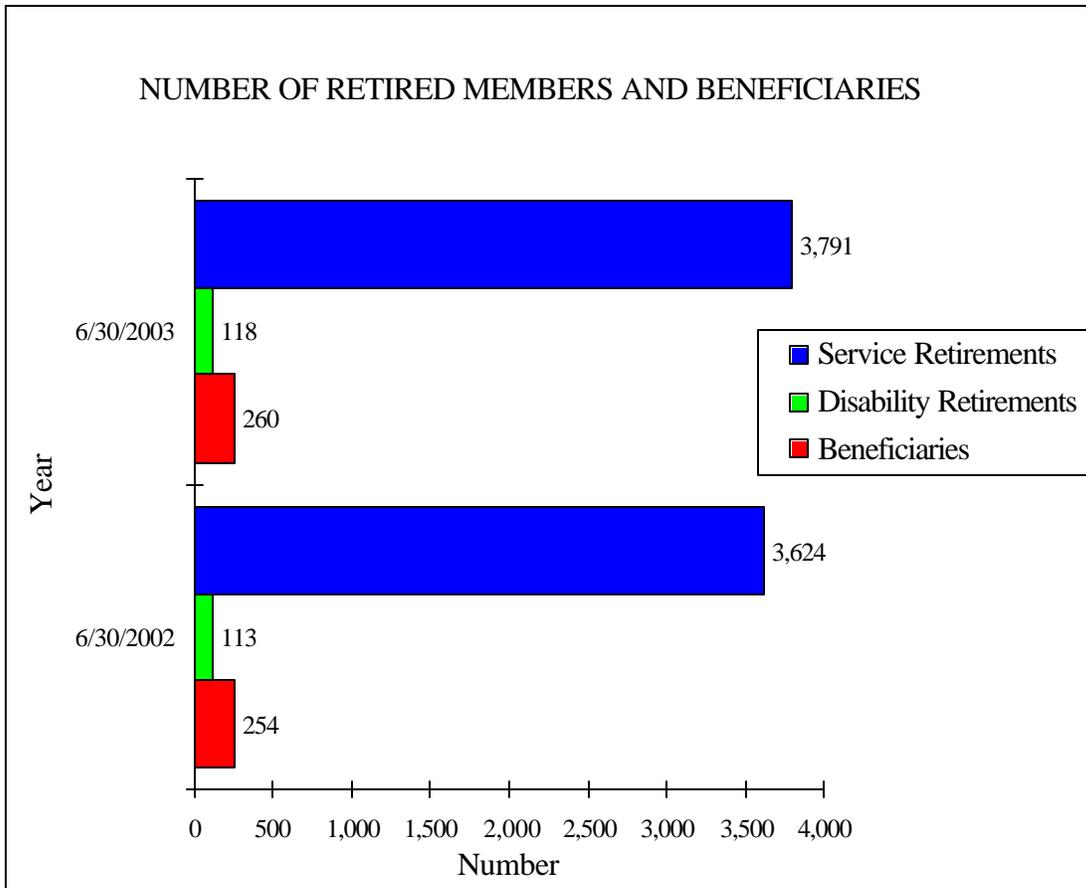
3. The following tables show a summary of membership of the system:

THE NUMBER AND ANNUAL ALLOWANCES OF RETIRED MEMBERS  
AND BENEFICIARIES AS OF JUNE 30, 2003

| GROUP                             | NUMBER | ANNUAL<br>ALLOWANCES |
|-----------------------------------|--------|----------------------|
| Service Retirements               | 3,791  | \$47,167,331         |
| Disability Retirements            | 118    | \$1,344,759          |
| Beneficiaries of Deceased Members | 260    | \$2,028,907          |
| Total                             | 4,169  | \$50,540,997         |

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS  
AS OF JUNE 30, 2003

| GROUP   | NUMBER | ANNUAL<br>COMPENSATION |
|---------|--------|------------------------|
| Group A | 54     | \$2,800,274            |
| Group C | 10,301 | \$434,438,269          |
| Total   | 10,355 | \$437,238,543          |



SECTION III - ASSETS

1. The amount of assets taken into account in the valuation is based on information supplied by the Office of the State Treasurer.
2. For actuarial purposes, the assets are valued using a method that reflects the market value of assets through gradual recognition of any unrealized appreciation or depreciation in assets beyond the assumed 8½% rate of return that was assumed through the end of fiscal year 2003, provided the adjusted asset value is within 20% of the market value. The following shows the development of the valuation assets.

|  |                      |                        |
|--|----------------------|------------------------|
| Assets for valuation purposes, June 30, 2002     |                      | \$1,169,293,733        |
| Cash flow during year (net of investment income) |                      |                        |
| Contributions paid                               | \$ 39,705,151        |                        |
| Benefit payouts                                  | (52,221,055)         |                        |
| Expenses   | <u>(12,095,759)</u>  |                        |
| Net  |                      | (24,611,663)           |
| Expected investment income (8-1/2%)              |                      | <u>103,041,466</u>     |
| Preliminary asset value                          |                      | \$1,247,723,536        |
| Market value, June 30, 2003                      | \$ 1,099,109,824     |                        |
| Preliminary asset value                          | <u>1,247,723,536</u> |                        |
| Unrecognized appreciation                        | \$ (148,613,712)     |                        |
| Adjustment                                       | x 20%                | <u>\$ (29,722,742)</u> |
| Adjusted asset value                             |                      | \$1,218,000,794        |
| Assets for valuation purposes, June 30, 2003     |                      | \$1,218,000,794        |

3. The assets for valuation purposes are 110.82% of market value.
4. The investment rate of return for the year ending June 30, 2003 is 6.34%, based on the valuation assets.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of the report contains the valuation balance sheet, which shows the present and prospective assets and liabilities of the system as of June 30, 2003.
2. The adjusted assets of the system amount to \$1,218,000,794. The present value of prospective allowances to be paid to current retired members, terminated vested members and beneficiaries amounts to \$551,574,185 and the present value of prospective benefits expected to become payable to current active and inactive members amounts to \$1,199,217,330, for total liabilities of \$1,750,791,515. Therefore, after subtracting assets of \$1,218,000,794, the amount to be provided through prospective contributions is \$532,790,721.
3. Prospective member contributions have a value of \$120,725,395, which leaves \$412,065,326 to be met by the State. The State's contributions consist of a normal contribution and an accrued liability contribution. The accrued liability contribution represents the amount (assumed to increase by 5% each year) necessary to liquidate the balance of the unfunded accrued liability as of June 30, 2003 over a 15-year period from that date. Future normal contributions represent the balance of contributions needed to fund the system. After subtracting the current balance of the unfunded accrued liability (after adjustment for the changes in actuarial assumptions effective with this valuation described in Section I), which is \$140,821,352, from the present value of prospective State contributions, \$412,065,326, there remains \$271,243,974 to be met by future normal contributions. We have calculated that future normal contributions at the rate of 6.83% of members' compensation are required to provide this amount.
4. The normal contribution rate of 6.83% may be compared to the rate of 5.65% determined as of June 30, 2002 on the basis of the assumptions adopted effective with this valuation. A re-calculation of the normal contribution rate as of June 30, 2002 on the basis of those assumptions

was presented in Appendix IV of our report on the results of the experience study of the System covering the five-year period ending June 30, 2002. The following table presents a summary of the approximate effects of major experience factors affecting the system's normal contribution rate since June 30, 2002:

| ITEM                            | EFFECT OF<br>(GAIN) OR LOSS |
|---------------------------------|-----------------------------|
| Normal rate as of June 30, 2002 | 5.65%                       |
| Investment experience           | +0.75%                      |
| Salary increases                | +0.08%                      |
| Retired member mortality        | -0.14%                      |
| COLA                            | -0.11%                      |
| Non-investment expenses         | +0.19%                      |
| New members                     | +0.00%                      |
| Contribution shortfall          | +0.37%                      |
| Net withdrawal/retirement       | +0.04%                      |
| Normal rate as of June 30, 2003 | 6.83%                       |

#### SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 1942, Subsection (n), of Title 16, Chapter 55, Vermont Statutes Annotated, relating to the State Teachers' Retirement System of Vermont, indicates that the actuary shall submit to the Board of Trustees his recommendation as to the contributions payable by the State based on annual valuations of the assets and liabilities of the system.
2. On the basis of the results of the current valuation, the actuary recommends that the Board of Trustees certify the following contributions for the fiscal year commencing July 1, 2003:

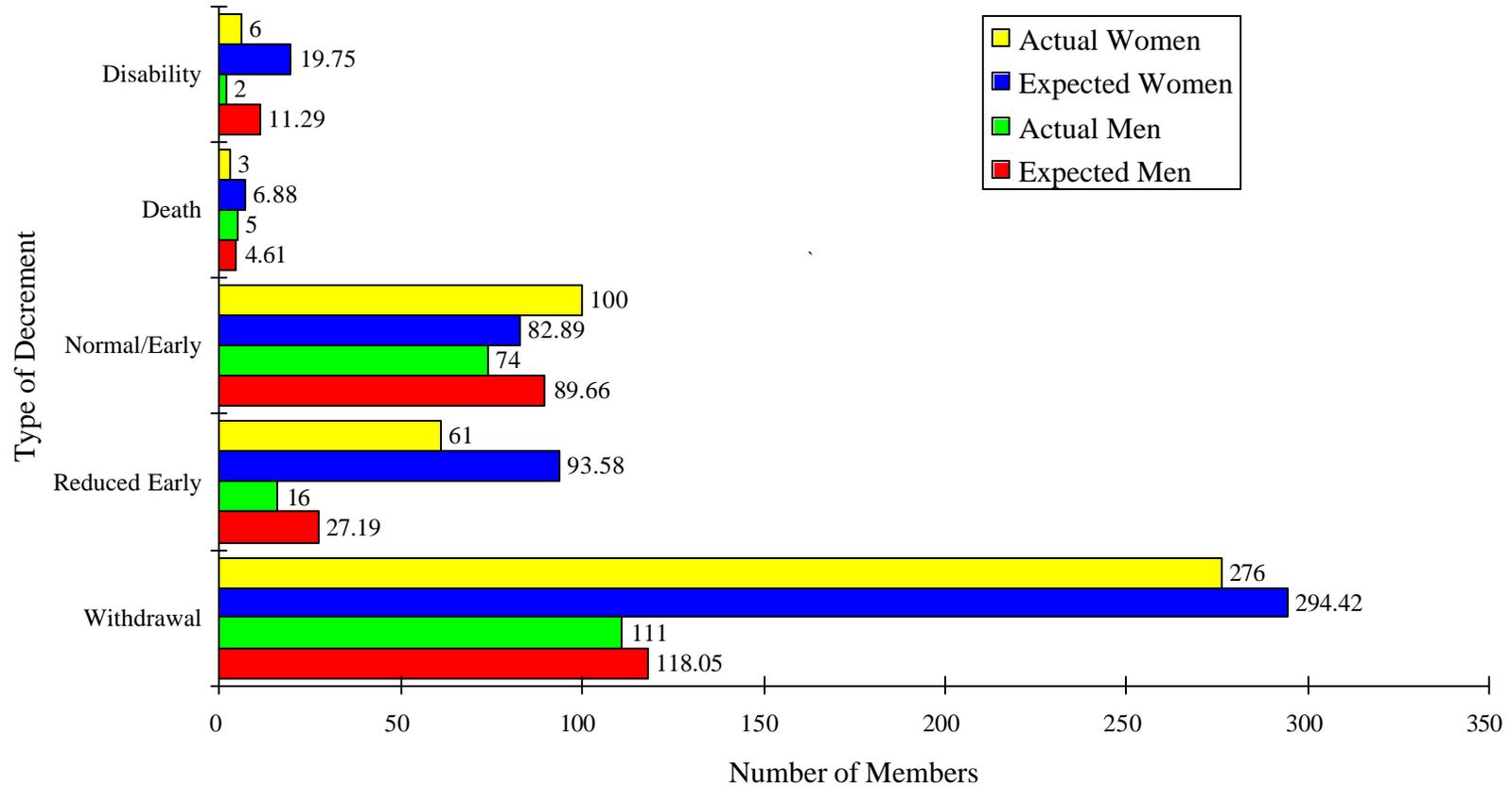
|                                |                   |
|--------------------------------|-------------------|
| Normal contribution            | \$29,863,392      |
| Accrued liability contribution | <u>11,795,554</u> |
| Total                          | \$41,658,946      |

SECTION VI - EXPERIENCE

1. Records are maintained whereby the actual experience of the System may be compared with the expected experience based on the tables adopted by the Board of Trustees. This experience is reviewed periodically, and any change suggested by the cumulative experience of the system will be recommended to the Board.
2. The active service and salary experience for the latest year is summarized in graphs on the following pages.

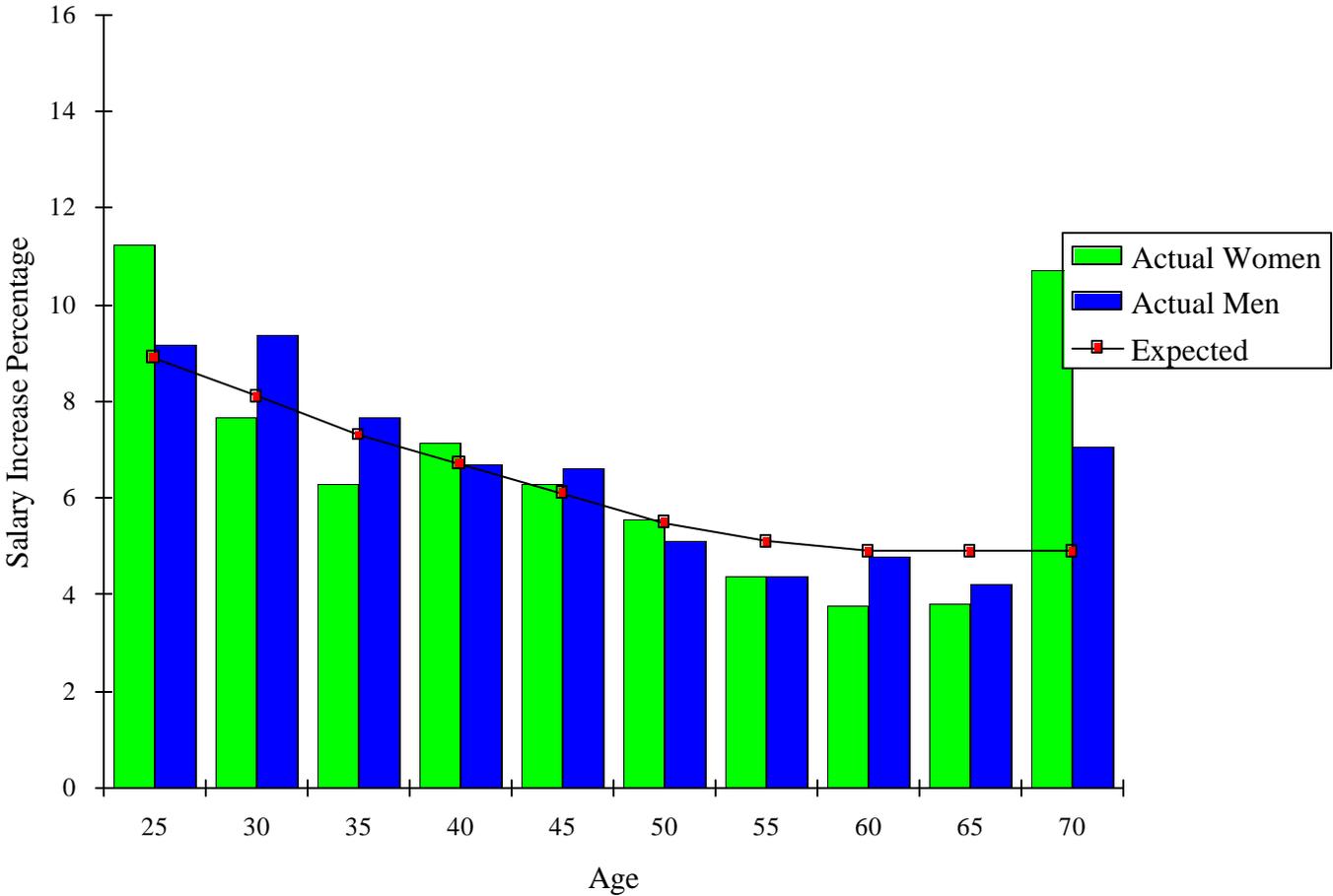
### ACTIVE SERVICE EXPERIENCE

July 1, 2002 through June 30, 2003



### SALARY EXPERIENCE

JULY 1, 2003 THROUGH JUNE 30, 2003



SECTION VII - ACCOUNTING INFORMATION

1. Based on our interpretation of Statement No. 25 of the Governmental Accounting Standards Board (GASB), we are providing the following Schedule of Funding Progress for accounting purposes.

SCHEDULE OF FUNDING PROGRESS

(dollar amounts in thousands)

| Year Ending<br>June 30 | Actuarial<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability<br>(AAL)<br>(b) | Unfunded<br>AAL<br>(UAAL)<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as a<br>Percentage of<br>Covered<br>Payroll<br>((b-a)/c) |
|------------------------|--|---|------------------------------------|--------------------------|---------------------------|---|
| 2003                   | \$1,218,001                            | \$1,358,822                                       | \$140,821                          | 89.6%                    | \$437,239                 | 32.2%   |
| 2002                   | 1,169,294                              | 1,307,202   | 137,908                            | 89.5%                    | 418,904                   | 32.9%   |
| 2001                   | 1,116,846                              | 1,254,341   | 137,496                            | 89.0%                    | 403,258                   | 34.1%   |
| 2000                   | 1,037,466                              | 1,174,087   | 136,621                            | 88.4%                    | 387,999                   | 35.2%   |
| 1999                   | 931,056                                | 1,066,400   | 135,343                            | 87.3%                    | 372,299                   | 36.4%   |
| 1998                   | 821,977                                | 955,694   | 133,717                            | 86.0%                    | 357,899                   | 37.4%   |
| 1997                   | 717,396                                | 849,179   | 131,783                            | 84.5%                    | 364,695                   | 36.1%   |
| 1996                   | 570,776                                | 700,377   | 129,601                            | 81.5%                    | 355,895                   | 36.4%   |
| 1995                   | 520,850                                | 648,052   | 127,202                            | 80.4%                    | 346,975                   | 36.7%   |
| 1994                   | 473,229                                | 597,851   | 124,622                            | 79.2%                    | 335,155                   | 37.2%   |
| 1993                   | 433,327                                | 555,220   | 121,893                            | 78.1%                    | 324,537                   | 37.6%   |
| 1992                   | 390,098                                | 509,140   | 119,042                            | 76.6%                    | 312,347                   | 38.1%   |
| 1991                   | 360,301                                | 476,397   | 116,096                            | 75.6%                    | 316,669                   | 36.7%   |
| 1990                   | 328,338                                | 441,414   | 113,076                            | 74.4%                    | 289,641                   | 39.0%   |

2. GASB Statement No. 27 requires the development of Annual Pension Cost and Net Pension Obligation. This development is shown in the following table.

DEVELOPMENT OF PENSION COST AND NET PENSION OBLIGATION (NPO)

| Year Ending June 30 | Annual Required Contribution | Interest on NPO | Amortization of NPO | Pension Cost (1)+(2)-(3) | Actual Contribution | Change in NPO (4)-(5) | NPO Balance |
|---------------------|------------------------------|-----------------|---------------------|--------------------------|---------------------|-----------------------|-------------|
|                     | (1)                          | (2)             | (3)                 | (4)                      | (5)                 | (6)                   | (7)         |
| 1988                | 16,294,346                   | 0               | 0                   | 16,294,346               | 17,186,259          | (891,913)             | (891,913)   |
| 1989                | 18,072,172                   | (75,813)        | (74,450)            | 18,070,809               | 19,000,000          | (929,191)             | (1,821,104) |
| 1990                | 21,320,155                   | (154,794)       | (145,688)           | 21,311,049               | 19,561,000          | 1,750,049             | (71,055)    |
| 1991                | 25,013,437                   | (6,040)         | (5,299)             | 25,012,696               | 15,000,000          | 10,012,696            | 9,941,641   |
| 1992                | 28,595,220                   | 845,039         | 833,331             | 28,606,928               | 14,618,992          | 13,987,936            | 23,929,577  |
| 1993                | 28,819,875                   | 2,034,014       | 2,274,675           | 28,579,214               | 19,890,048          | 8,689,166             | 32,618,743  |
| 1994                | 25,805,408                   | 2,772,593       | 2,970,742           | 25,607,259               | 20,580,000          | 5,027,259             | 37,646,002  |
| 1995                | 27,451,926                   | 3,199,910       | 3,544,821           | 27,107,015               | 18,080,000          | 9,027,015             | 46,673,017  |
| 1996                | 28,711,597                   | 3,967,206       | 4,374,228           | 28,304,575               | 11,480,000          | 16,824,575            | 63,497,592  |
| 1997                | 30,721,768                   | 5,397,295       | 6,111,414           | 30,007,649               | 18,080,000          | 11,927,649            | 75,425,241  |
| 1998                | 26,927,205                   | 6,411,145       | 6,285,437           | 27,052,913               | 18,106,581          | 8,946,332             | 84,371,573  |
| 1999                | 20,723,874                   | 7,171,584       | 8,231,373           | 19,664,085               | 18,080,000          | 1,584,085             | 85,955,658  |
| 2000                | 19,936,345                   | 7,306,231       | 8,385,918           | 18,856,658               | 18,586,240          | 270,418               | 86,226,076  |
| 2001                | 20,970,278                   | 7,329,216       | 8,412,300           | 19,887,194               | 19,143,827          | 743,367               | 86,969,443  |
| 2002                | 22,146,880                   | 7,392,403       | 8,484,824           | 21,054,459               | 20,446,282          | 608,177               | 87,577,620  |
| 2003                | 28,279,810                   | 7,444,098       | 8,012,591           | 27,711,317               | 20,446,282          | 7,265,035             | 94,842,655  |

SCHEDULE A

VALUATION BALANCE SHEET  
SHOWING THE ASSETS AND LIABILITIES OF THE  
STATE TEACHERS' RETIREMENT SYSTEM OF VERMONT  
PREPARED AS OF JUNE 30, 2003

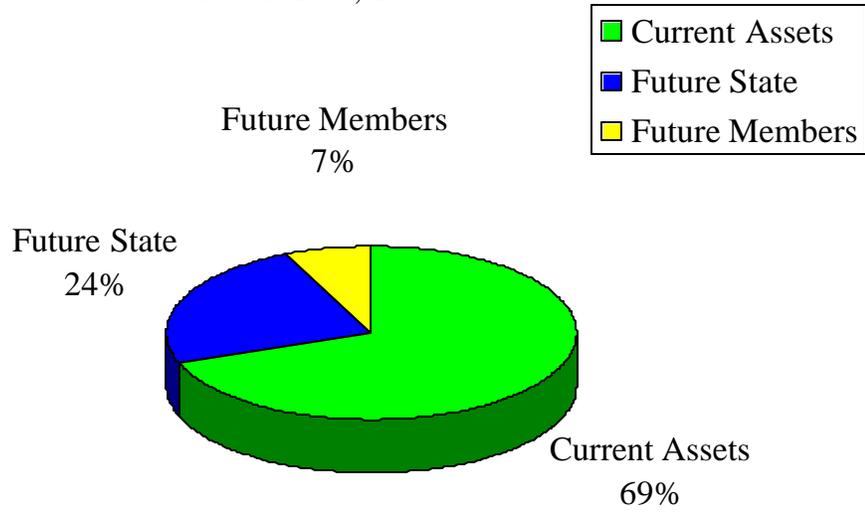
VALUATION BALANCE SHEET  
 SHOWING THE ASSETS AND LIABILITIES OF THE  
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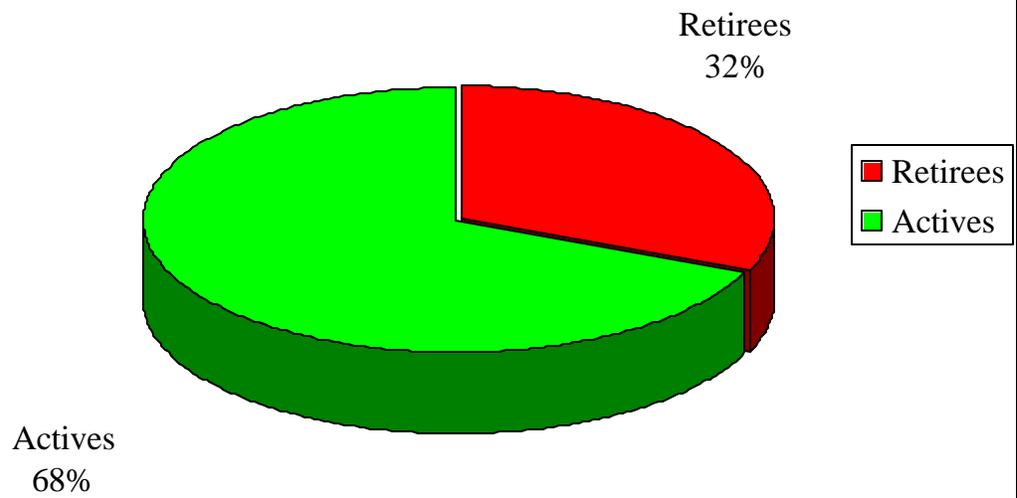
| ASSETS   |                               |
|--|-------------------------------|
| Adjusted assets of the system  | \$1,218,000,794               |
| Present value of prospective contributions   |                               |
| Members  | \$120,725,395                 |
| State  |                               |
| Accrued liability contributions  | 140,821,352                   |
| Normal contributions   | <u>271,243,974</u>            |
| Total prospective contributions  | <u>\$ 532,790,721</u>         |
| Total assets   | <u><u>\$1,750,791,515</u></u> |
| LIABILITIES  |                               |
| Actuarial present value of benefits payable on<br>account of present retired members, terminated<br>vested members and beneficiaries | \$ 551,574,185                |
| Actuarial present value of benefits expected<br>to become payable on account of active and<br>inactive members                       | <u>1,199,217,330</u>          |
| Total liabilities  | <u><u>\$1,750,791,515</u></u> |

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ASSETS  
AS OF JUNE 30, 2003



LIABILITIES  
AS OF JUNE 30, 2003



SCHEDULE B

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: In previous valuation, 8.50% per annum, compounded annually; in the current valuation, 8.00%, compounded annually.

SEPARATIONS BEFORE NORMAL RETIREMENT: Representative values of the assumed annual rates of withdrawal, vested retirement, early retirement, disability and death are as follows:

In the previous valuation:

| Age | Withdrawal and Vested Retirement |         | Disability |         | Death |         |
|-----|----------------------------------|---------|------------|---------|-------|---------|
|     | Males                            | Females | Males      | Females | Males | Females |
| 25  | 6.75%                            | 8.10%   | .01%       | .02%    | .04%  | .03%    |
| 30  | 6.75                             | 6.75    | .02        | .02     | .04   | .03     |
| 35  | 6.08                             | 5.40    | .02        | .02     | .04   | .03     |
| 40  | 5.06                             | 4.50    | .04        | .02     | .08   | .03     |
| 45  | 4.50                             | 3.98    | .07        | .05     | .08   | .05     |
| 50  | 4.50                             | 3.38    | .24        | .18     | .12   | .08     |
| 55  | 4.50                             | 3.38    | .44        | .39     | .12   | .12     |
| 59  | 4.50                             | 3.38    | 1.17       | .71     | .15   | .18     |
| 60  | 4.50                             | 3.38    | 1.47       | .84     | .15   | .19     |
| 61  | 4.50                             | 3.38    | 1.83       | 1.01    | .50   | .22     |

| Age | Reduced Early Retirement |         | Full Early Retirement |         |
|-----|--------------------------|---------|-----------------------|---------|
|     | Males                    | Females | Males                 | Females |
| 50  | -                        | -       | 22.0%                 | 20.0%   |
| 55  | 10.00%                   | 8.75%   | 30.8                  | 20.0    |
| 56  | 8.00                     | 6.25    | 17.6                  | 10.0    |
| 57  | 6.00                     | 6.25    | 16.5                  | 10.0    |
| 58  | 6.00                     | 6.25    | 16.5                  | 10.0    |
| 59  | 6.00                     | 6.25    | 20.9                  | 10.0    |
| 60  | 6.00                     | 12.50   | 27.5                  | 20.0    |
| 61  | 20.00                    | 12.50   | 22.0                  | 17.0    |

In the present valuation:

| Age | Withdrawal and Vested Retirement |         | Disability |         | Death |         |
|-----|----------------------------------|---------|------------|---------|-------|---------|
|     | Males                            | Females | Males      | Females | Males | Females |
| 25  | 5.40%                            | 6.48%   | .010%      | .020%   | .04%  | .03%    |
| 30  | 5.40                             | 5.40    | .020       | .020    | .04   | .03     |
| 35  | 4.86                             | 4.32    | .020       | .020    | .04   | .03     |
| 40  | 4.05                             | 3.60    | .030       | .020    | .08   | .03     |
| 45  | 3.60                             | 3.15    | .053       | .050    | .08   | .05     |
| 50  | 3.60                             | 2.70    | .180       | .180    | .12   | .08     |
| 55  | 3.60                             | 2.70    | .440       | .390    | .12   | .12     |
| 59  | 3.60                             | 2.70    | 1.170      | .710    | .15   | .18     |
| 60  | 3.60                             | 2.70    | 1.470      | .840    | .15   | .19     |
| 61  | 3.60                             | 2.70    | 1.830      | 1.010   | .50   | .22     |

| Age | Reduced Early Retirement |         | Full Early Retirement |         |
|-----|--------------------------|---------|-----------------------|---------|
|     | Males                    | Females | Males                 | Females |
| 50  | -                        | -       | 44.00%                | 40.00%  |
| 55  | 5.00%                    | 8.75%   | 30.80                 | 20.00   |
| 56  | 4.00                     | 6.25    | 17.60                 | 10.00   |
| 57  | 3.00                     | 6.25    | 16.50                 | 10.00   |
| 58  | 6.00                     | 6.25    | 16.50                 | 10.00   |
| 59  | 6.00                     | 6.25    | 20.90                 | 10.00   |
| 60  | 6.00                     | 12.50   | 41.25                 | 30.00   |
| 61  | 20.00                    | 12.50   | 22.00                 | 17.00   |

SERVICE RETIREMENTS: Occur between ages 62 (60 for Group A) and 70. The assumed rates of service retirement are as follows:

In the previous valuation:

| Age | Annual Rate of Retirement |        |
|-----|---------------------------|--------|
|     | Male                      | Female |
| 62  | 35.2%                     | 25.0%  |
| 63  | 26.4                      | 20.0   |
| 64  | 27.6                      | 20.0   |
| 65  | 41.8                      | 30.0   |
| 66  | 33.0                      | 30.0   |
| 67  | 33.0                      | 30.0   |
| 68  | 33.0                      | 30.0   |
| 69  | 33.0                      | 30.0   |
| 70  | 100.0                     | 100.0  |

In the current valuation:

| Age | Annual Rate of Retirement |        |
|-----|---------------------------|--------|
|     | Male                      | Female |
| 62  | 35.2%                     | 25.0%  |
| 63  | 26.4                      | 20.0   |
| 64  | 27.5                      | 20.0   |
| 65  | 41.8                      | 30.0   |
| 66  | 33.0                      | 30.0   |
| 67  | 39.6                      | 30.0   |
| 68  | 26.4                      | 30.0   |
| 69  | 33.0                      | 20.0   |
| 70  | 100.0                     | 100.0  |

**SALARY INCREASES:** Representative values of the assumed annual rates of future salary increase are as follows:

In the previous valuation:

| Age | Annual Rate of Salary Increase |
|-----|--------------------------------|
| 25  | 8.90%                          |
| 30  | 8.10                           |
| 35  | 7.30                           |
| 40  | 6.70                           |
| 45  | 6.10                           |
| 50  | 5.50                           |
| 55  | 5.10                           |
| 60  | 4.90                           |
| 64  | 4.90                           |

In the current valuation:

| Age | Annual Rate of Salary Increase |
|-----|--------------------------------|
| 25  | 10.68%                         |
| 30  | 8.10                           |
| 35  | 7.30                           |
| 40  | 6.03                           |
| 45  | 5.49                           |
| 50  | 4.95                           |
| 55  | 4.59                           |
| 60  | 4.41                           |
| 64  | 4.41                           |

**DEATHS AFTER RETIREMENT:** In the previous valuation, the unrated 1995 Buck Mortality Table was used for the period after service retirement; a special mortality table (i.e., the 1979 PBGC Disability Mortality Table) was used for the period following disability retirement. In the current valuation, the 1995 Buck Mortality Table set back one year was used for the period after service retirement, while the RP-2000 Tables for Disabled Retirees was used for the period following disability retirement.

**FUTURE EXPENSES:** No provision made.

**ACTUARIAL COST METHOD:** Projected benefit method with aggregate level normal cost and frozen supplemental liability (entry age normal cost with frozen initial liability).

**SPOUSE'S AGE:** Husbands are assumed to be 3 years older than their wives.

**PERCENT MARRIED:** 85% of the male members and 35% of the female members are assumed to be married.

**COST-OF-LIVING ADJUSTMENTS:** In the previous valuation, these were assumed to occur on January 1 following one year of retirement at the rate of 4% per annum for Group A and 2% per annum for Group C (beginning at age 62 for Group C reduced early retirements). In the current valuation, the assumed 4% and 2% rates of increase have been lowered to 3% and 1.5%, respectively.

**ASSET VALUATION METHOD:** The amount of the assets for valuation purposes equals the preliminary asset value plus 20% of the difference between the market and preliminary asset values. The preliminary asset value is equal to the previous year's asset value (for valuation purposes) adjusted for contributions less benefit payments and expenses and expected investment income. If necessary, a further adjustment is made to ensure that the valuation assets are within 20% of the market value.

**INACTIVE MEMBERS:** Ten percent are assumed to return to active service, the remaining ninety percent are assumed to terminate. This is effected by holding a liability equal to 150% of accumulated contributions of inactive members for valuation purposes.

**HEALTH AND MEDICAL BENEFITS FOR RETIREES:** Not included in this valuation.

SCHEDULE C

BRIEF SUMMARY OF PRINCIPAL PLAN PROVISIONS  
AS INTERPRETED FOR VALUATION PURPOSES

BRIEF SUMMARY OF PRINCIPAL PLAN PROVISIONS  
AS INTERPRETED FOR VALUATION PURPOSES

|                                  |  |
|----------------------------------|--|
| Effective Date                   | July 1, 1947.  |
| Creditable Service               | Service as a member plus purchased service.                    |
| Average Final Compensation (AFC) | Average annual compensation during highest 3 successive years. |
| Membership                       | Immediate upon employment.                                     |

|                              | <u>GROUP A</u>  | <u>GROUP C</u>   |
|------------------------------|---|--|
| Service Retirement Allowance |   |  |
| Eligibility                  | Age 60 or 30 years of creditable service.   | Age 62 or 30 years of creditable service.  |
| Amount of Allowance          | Member annuity based on accumulated contributions plus a pension which, with member annuity, equals 1/60 of AFC times creditable service. | Member annuity based on accumulated contributions plus a pension which, with member annuity, equals 1/80 of AFC times creditable service prior to July 1, 1990 plus 1/60 of AFC times creditable service after July 1, 1990. |
| Minimum                      | \$6,600 after 30 years of creditable service (pro-rata portion if less than 30 years).  | \$6,600 after 30 years of creditable service (pro-rata portion if less than 30 years).   |
| Maximum                      | None  | 50% of AFC.  |

|                                 | <u>GROUP A</u>   | <u>GROUP C</u>   |
|---------------------------------|--|--|
| Early Retirement Allowance      |  |  |
| Eligibility                     | Age 55.  | Age 55 and 5 years of creditable service.  |
| Amount of Allowance             | Actuarial equivalent of service allowance using AFC and creditable service at early retirement.  | Accrued normal benefit reduced 6% for each year under age 62. No reduction if credited service is 30 years or more.                                      |
| Vested Retirement Allowance     |  |  |
| Eligibility                     | 5 years of creditable service.   | 5 years of creditable service.   |
| Amount of Allowance             | Commencing at age 60 calculated as a service allowance using AFC and creditable service at termination.  | Commencing at age 62, calculated as a service allowance using AFC and creditable service at termination.   |
| Disability Retirement Allowance |  |  |
| Eligibility                     | Total and permanent disability after 5 years of creditable service (5 years preceding retirement served in State).                                       | Total and permanent disability after 5 years of creditable service (5 years preceding retirement served in State).                                       |
| Amount of Allowance             | Calculated as a service allowance based on AFC and creditable service at disability retirement, subject to a 25% of AFC minimum.                         | Calculated as a service allowance based on AFC and creditable service at disability retirement, subject to a 25% of AFC minimum.                         |
| Death Benefits                  |  |  |
| Eligibility                     | Age 60 or 30 years of creditable service; 20 years of creditable service if in service at death.   | Age 55 and 5 years of creditable service or 20 years of creditable service.  |
| Amount of Allowance             | Accrued allowance paid under 100% survivorship option. If the eligibility requirements are not met or if beneficiary so elects, the member's accumulated | Accrued allowance paid under 100% survivorship option. If the eligibility requirements are not met or if beneficiary so elects, the member's accumulated |

|                             | <u>GROUP A</u>  | <u>GROUP C</u>  |
|-----------------------------|---|---|
|                             | contributions are paid to the beneficiary or estate. Certain children's benefits may also be payable.   | contributions are paid to the beneficiary or estate. Certain children's benefits may also be payable.   |
| Return of Contributions     | If no other beneficiary is payable, a terminated member receives his accumulated contributions with interest.   | If no other beneficiary is payable, a terminated member receives his accumulated contributions with interest.   |
| Options                     | The allowance may be paid in various optional forms at the election of the member.  | The allowance may be paid in various optional forms at the election of the member.  |
| Post-retirement Adjustments | On each December 31 allowances in payment for at least one year are adjusted for cost of living based on the consumer price index, but not in excess of 5%. | On each December 31, allowances in payment for at least one year are adjusted for cost of living based on one-half of the consumer price index, but not in excess of 5%. For members receiving a reduced early retirement allowance, the adjustment will not apply before age 62. |
| Contributions               |   |   |
| Members                     | 5.5% of earnable compensation. Contributions stop after 25 years of creditable service.   | 3.4% of earnable compensation.  |
| State                       | Normal and accrued liability contributions actuarially determined to keep the system financially sound.   | Normal and accrued liability contributions actuarially determined to keep the system financially sound.   |

SCHEDULE D

SUMMARY TABLES OF MEMBER DATA AS OF JUNE 30, 2003

TABLE 1  
THE NUMBER AND ANNUAL COMPENSATION OF  
ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE  
AS OF JUNE 30, 2003

| AGE      | <i>0 to 4</i> |            | <i>5 to 9</i> |            | <i>10 to 14</i> |            | <i>15 to 19</i> |            | <i>20 to 24</i> |            | <i>25 to 29</i> |            | <i>30 to 34</i> |            | <i>35 to 39</i> |           | <i>40 &amp; up</i> |         | <i>Total</i> |             |   |
|----------|---------------|------------|---------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|-----------|--------------------|---------|--------------|-------------|---|
|          | No.           | Salary     | No.           | Salary     | No.             | Salary     | No.             | Salary     | No.             | Salary     | No.             | Salary     | No.             | Salary     | No.             | Salary    | No.                | Salary  | No.          | Salary      |   |
| Under 20 | 0             | 0          | 0             | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 0            | 0           | 0 |
| 20 to 24 | 134           | 3,325,133  | 0             | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 134          | 3,325,133   |   |
| 25 to 29 | 592           | 17,123,806 | 105           | 3,538,883  | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 697          | 20,662,689  |   |
| 30 to 34 | 500           | 15,430,890 | 422           | 15,463,416 | 58              | 2,432,962  | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 980          | 33,327,268  |   |
| 35 to 39 | 373           | 11,580,354 | 285           | 10,874,623 | 243             | 10,144,559 | 69              | 3,089,083  | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 970          | 35,688,619  |   |
| 40 to 44 | 353           | 11,211,022 | 294           | 11,487,369 | 260             | 11,423,115 | 302             | 13,998,884 | 68              | 3,315,903  | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 1,277        | 51,436,293  |   |
| 45 to 49 | 360           | 11,462,923 | 334           | 12,981,196 | 284             | 12,712,892 | 340             | 16,503,506 | 383             | 19,508,728 | 118             | 6,092,874  | 0               | 0          | 0               | 0         | 0                  | 0       | 1,819        | 79,262,119  |   |
| 50 to 54 | 295           | 10,405,972 | 333           | 13,500,660 | 383             | 17,136,914 | 414             | 20,340,585 | 429             | 22,092,935 | 477             | 25,326,357 | 107             | 5,749,441  | 0               | 0         | 0                  | 0       | 2,438        | 114,552,864 |   |
| 55 to 59 | 143           | 5,066,177  | 154           | 6,221,629  | 195             | 8,714,690  | 293             | 14,374,165 | 255             | 13,190,391 | 236             | 12,729,296 | 242             | 13,268,526 | 27              | 1,421,372 | 0                  | 0       | 1,545        | 74,986,246  |   |
| 60 to 64 | 41            | 1,556,511  | 39            | 1,683,704  | 51              | 2,199,767  | 72              | 3,535,650  | 78              | 3,966,799  | 67              | 3,523,838  | 53              | 2,897,282  | 29              | 1,644,956 | 4                  | 232,133 | 434          | 21,240,640  |   |
| 65 to 69 | 13            | 454,964    | 8             | 360,573    | 4               | 215,836    | 10              | 486,672    | 3               | 142,817    | 4               | 201,177    | 4               | 212,008    | 4               | 207,306   | 2                  | 127,213 | 52           | 2,408,566   |   |
| 70 & up  | 5             | 150,818    | 1             | 37,035     | 0               | 0          | 2               | 109,073    | 1               | 51,180     | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 9            | 348,106     |   |
| TOTAL    | 2,809         | 87,768,570 | 1,975         | 76,149,088 | 1,478           | 64,980,735 | 1,502           | 72,437,618 | 1,217           | 62,268,753 | 902             | 47,873,542 | 406             | 22,127,257 | 60              | 3,273,634 | 6                  | 359,346 | 10,355       | 437,238,543 |   |

TABLE 2  
 THE NUMBER AND ANNUAL COMPENSATION OF  
 ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE  
 AS OF JUNE 30, 2003

## GROUP A

| AGE      | <i>0 to 4</i> |        | <i>5 to 9</i> |        | <i>10 to 14</i> |        | <i>15 to 19</i> |         | <i>20 to 24</i> |           | <i>25 to 29</i> |         | <i>30 to 34</i> |         | <i>35 to 39</i> |         | <i>40 &amp; up</i> |        | <i>Total</i> |           |         |
|----------|---------------|--------|---------------|--------|-----------------|--------|-----------------|---------|-----------------|-----------|-----------------|---------|-----------------|---------|-----------------|---------|--------------------|--------|--------------|-----------|---------|
|          | No.           | Salary | No.           | Salary | No.             | Salary | No.             | Salary  | No.             | Salary    | No.             | Salary  | No.             | Salary  | No.             | Salary  | No.                | Salary | No.          | Salary    |         |
| Under 20 | 0             | 0      | 0             | 0      | 0               | 0      | 0               | 0       | 0               | 0         | 0               | 0       | 0               | 0       | 0               | 0       | 0                  | 0      | 0            | 0         | 0       |
| 20 to 24 | 0             | 0      | 0             | 0      | 0               | 0      | 0               | 0       | 0               | 0         | 0               | 0       | 0               | 0       | 0               | 0       | 0                  | 0      | 0            | 0         | 0       |
| 25 to 29 | 0             | 0      | 0             | 0      | 0               | 0      | 0               | 0       | 0               | 0         | 0               | 0       | 0               | 0       | 0               | 0       | 0                  | 0      | 0            | 0         | 0       |
| 30 to 34 | 0             | 0      | 0             | 0      | 0               | 0      | 0               | 0       | 0               | 0         | 0               | 0       | 0               | 0       | 0               | 0       | 0                  | 0      | 0            | 0         | 0       |
| 35 to 39 | 0             | 0      | 0             | 0      | 0               | 0      | 0               | 0       | 0               | 0         | 0               | 0       | 0               | 0       | 0               | 0       | 0                  | 0      | 0            | 0         | 0       |
| 40 to 44 | 0             | 0      | 0             | 0      | 0               | 0      | 1               | 44,825  | 2               | 95,429    | 0               | 0       | 0               | 0       | 0               | 0       | 0                  | 0      | 0            | 3         | 140,254 |
| 45 to 49 | 0             | 0      | 0             | 0      | 1               | 35,500 | 3               | 112,545 | 7               | 370,148   | 1               | 44,467  | 0               | 0       | 0               | 0       | 0                  | 0      | 0            | 12        | 562,660 |
| 50 to 54 | 0             | 0      | 0             | 0      | 0               | 0      | 1               | 42,340  | 6               | 285,580   | 5               | 256,280 | 1               | 65,384  | 0               | 0       | 0                  | 0      | 0            | 13        | 649,584 |
| 55 to 59 | 0             | 0      | 0             | 0      | 0               | 0      | 2               | 112,006 | 4               | 208,107   | 4               | 224,254 | 4               | 287,219 | 2               | 99,733  | 0                  | 0      | 0            | 16        | 931,319 |
| 60 to 64 | 0             | 0      | 0             | 0      | 0               | 0      | 2               | 96,217  | 4               | 204,020   | 1               | 53,895  | 1               | 50,916  | 1               | 49,635  | 0                  | 0      | 0            | 9         | 454,683 |
| 65 to 69 | 0             | 0      | 0             | 0      | 0               | 0      | 0               | 0       | 0               | 0         | 0               | 0       | 0               | 0       | 0               | 0       | 1                  | 61,774 | 1            | 61,774    | 0       |
| 70 & up  | 0             | 0      | 0             | 0      | 0               | 0      | 0               | 0       | 0               | 0         | 0               | 0       | 0               | 0       | 0               | 0       | 0                  | 0      | 0            | 0         | 0       |
| TOTAL    | 0             | 0      | 0             | 0      | 1               | 35,500 | 9               | 407,933 | 23              | 1,163,284 | 11              | 578,896 | 6               | 403,519 | 3               | 149,368 | 1                  | 61,774 | 54           | 2,800,274 | 0       |

TABLE 3  
THE NUMBER AND ANNUAL COMPENSATION OF  
ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE  
AS OF JUNE 30, 2003

GROUP C

| AGE      | <i>0 to 4</i> |            | <i>5 to 9</i> |            | <i>10 to 14</i> |            | <i>15 to 19</i> |            | <i>20 to 24</i> |            | <i>25 to 29</i> |            | <i>30 to 34</i> |            | <i>35 to 39</i> |           | <i>40 &amp; up</i> |         | <i>Total</i> |             |
|----------|---------------|------------|---------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|-----------|--------------------|---------|--------------|-------------|
|          | No.           | Salary     | No.           | Salary     | No.             | Salary     | No.             | Salary     | No.             | Salary     | No.             | Salary     | No.             | Salary     | No.             | Salary    | No.                | Salary  | No.          | Salary      |
| Under 20 | 0             | 0          | 0             | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 0            | 0           |
| 20 to 24 | 134           | 3,325,133  | 0             | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 134          | 3,325,133   |
| 25 to 29 | 592           | 17,123,806 | 105           | 3,538,883  | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 697          | 20,662,689  |
| 30 to 34 | 500           | 15,430,890 | 422           | 15,463,416 | 58              | 2,432,962  | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 980          | 33,327,268  |
| 35 to 39 | 373           | 11,580,354 | 285           | 10,874,623 | 243             | 10,144,559 | 69              | 3,089,083  | 0               | 0          | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 970          | 35,688,619  |
| 40 to 44 | 353           | 11,211,022 | 294           | 11,487,369 | 260             | 11,423,115 | 301             | 13,954,059 | 66              | 3,220,474  | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 1,274        | 51,296,039  |
| 45 to 49 | 360           | 11,462,923 | 334           | 12,981,196 | 283             | 12,677,392 | 337             | 16,390,961 | 376             | 19,138,580 | 117             | 6,048,407  | 0               | 0          | 0               | 0         | 0                  | 0       | 1,807        | 78,699,459  |
| 50 to 54 | 295           | 10,405,972 | 333           | 13,500,660 | 383             | 17,136,914 | 413             | 20,298,245 | 423             | 21,807,355 | 472             | 25,070,077 | 106             | 5,684,057  | 0               | 0         | 0                  | 0       | 2,425        | 113,903,280 |
| 55 to 59 | 143           | 5,066,177  | 154           | 6,221,629  | 195             | 8,714,690  | 291             | 14,262,159 | 251             | 12,982,284 | 232             | 12,505,042 | 238             | 12,981,307 | 25              | 1,321,639 | 0                  | 0       | 1,529        | 74,054,927  |
| 60 to 64 | 41            | 1,556,511  | 39            | 1,683,704  | 51              | 2,199,767  | 70              | 3,439,433  | 74              | 3,762,779  | 66              | 3,469,943  | 52              | 2,846,366  | 28              | 1,595,321 | 4                  | 232,133 | 425          | 20,785,957  |
| 65 to 69 | 13            | 454,964    | 8             | 360,573    | 4               | 215,836    | 10              | 486,672    | 3               | 142,817    | 4               | 201,177    | 4               | 212,008    | 4               | 207,306   | 1                  | 65,439  | 51           | 2,346,792   |
| 70 & up  | 5             | 150,818    | 1             | 37,035     | 0               | 0          | 2               | 109,073    | 1               | 51,180     | 0               | 0          | 0               | 0          | 0               | 0         | 0                  | 0       | 9            | 348,106     |
| TOTAL    | 2,809         | 87,768,570 | 1,975         | 76,149,088 | 1,477           | 64,945,235 | 1,493           | 72,029,685 | 1,194           | 61,105,469 | 891             | 47,294,646 | 400             | 21,723,738 | 57              | 3,124,266 | 5                  | 297,572 | 10,301       | 434,438,269 |

TABLE 4

SUMMARY OF RETIRED MEMBER AND BENEFICIARY DATA  
BY LEVEL OF ANNUAL ALLOWANCE AS OF JUNE 30, 2003

ALL TEACHERS

| Allowance Level | Service Pensioners |                  | Disability Pensioners |                  | Beneficiaries |                  |
|-----------------|--------------------|------------------|-----------------------|------------------|---------------|------------------|
|                 | Number             | Annual Allowance | Number                | Annual Allowance | Number        | Annual Allowance |
| 0 - 500         | 10                 | \$ 2,586         | -                     | \$ -             | -             | \$ -             |
| 501 - 1,000     | 16                 | 11,898           | -                     | -                | 3             | 2,323            |
| 1,001 - 1,500   | 40                 | 51,177           | -                     | -                | 4             | 5,049            |
| 1,501 - 2,000   | 58                 | 101,948          | -                     | -                | 4             | 6,638            |
| 2,001 - 2,500   | 84                 | 189,014          | -                     | -                | 4             | 8,983            |
| 2,501 - 3,000   | 85                 | 234,911          | -                     | -                | 17            | 46,887           |
| 3,001 - 3,500   | 77                 | 248,958          | -                     | -                | 17            | 55,732           |
| 3,501 - 4,000   | 117                | 437,053          | -                     | -                | 9             | 33,173           |
| 4,001 - 4,500   | 119                | 506,841          | 1                     | 4,229            | 12            | 50,972           |
| 4,501 - 5,000   | 103                | 489,368          | 1                     | 4,784            | 7             | 34,231           |
| 5,001 - 5,500   | 99                 | 519,005          | 1                     | 5,305            | 14            | 73,858           |
| 5,501 - 6,000   | 121                | 698,231          | 5                     | 28,905           | 12            | 67,970           |
| 6,001 - 6,500   | 103                | 645,217          | 3                     | 18,762           | 13            | 81,258           |
| 6,501 - 7,000   | 98                 | 663,500          | 4                     | 26,926           | 13            | 87,936           |
| 7,001 - 7,500   | 81                 | 586,715          | 2                     | 14,698           | 12            | 87,022           |
| 7,501 - 8,000   | 93                 | 720,483          | 7                     | 54,320           | 9             | 69,769           |
| 8,001 - 8,500   | 88                 | 724,062          | 5                     | 41,736           | 13            | 107,919          |
| 8,501 - 9,000   | 91                 | 796,253          | 6                     | 52,213           | 10            | 87,669           |
| 9,001 - 9,500   | 85                 | 785,512          | 9                     | 84,223           | 8             | 74,038           |
| 9,501 - 10,000  | 89                 | 867,123          | 7                     | 68,761           | 7             | 68,329           |
| 10,001 - 10,500 | 95                 | 970,595          | 8                     | 81,365           | 10            | 102,124          |
| 10,501 - 11,000 | 80                 | 859,301          | 4                     | 43,481           | 6             | 64,816           |
| 11,001 - 11,500 | 85                 | 956,173          | 6                     | 67,803           | 9             | 100,659          |
| 11,501 - 12,000 | 75                 | 882,284          | 11                    | 129,106          | 7             | 82,069           |
| 12,001 - 12,500 | 65                 | 794,764          | 4                     | 49,128           | 3             | 36,234           |
| 12,501 - 13,000 | 67                 | 854,342          | 3                     | 38,547           | 4             | 50,643           |
| 13,001 - 13,500 | 83                 | 1,102,547        | 3                     | 39,858           | 6             | 78,984           |
| 13,501 - 14,000 | 77                 | 1,056,570        | 2                     | 27,390           | 5             | 68,113           |
| 14,001 - 14,500 | 93                 | 1,325,888        | 3                     | 43,131           | 3             | 42,744           |
| 14,501 - 15,000 | 82                 | 1,208,887        | 1                     | 14,878           | 2             | 29,583           |
| 15,001 - 15,500 | 80                 | 1,220,435        | 3                     | 45,814           | 3             | 45,756           |
| 15,501 - 16,000 | 79                 | 1,241,867        | 3                     | 47,336           | 2             | 31,670           |
| 16,001 - 16,500 | 56                 | 910,217          | -                     | -                | 4             | 65,298           |
| 16,501 - 17,000 | 80                 | 1,338,944        | 2                     | 33,799           | 1             | 16,956           |
| 17,001 - 17,500 | 59                 | 1,017,910        | 5                     | 86,269           | 1             | 17,200           |
| 17,501 - 18,000 | 69                 | 1,223,044        | -                     | -                | -             | -                |
| 18,001 - 18,500 | 68                 | 1,239,324        | 1                     | 18,243           | -             | -                |
| 18,501 - 19,000 | 73                 | 1,368,271        | 3                     | 56,548           | -             | -                |
| 19,001 - 19,500 | 68                 | 1,309,593        | 1                     | 19,212           | 2             | 38,222           |
| 19,501 - 20,000 | 70                 | 1,381,319        | -                     | -                | 1             | 19,613           |
| 20,001 - 20,500 | 70                 | 1,414,674        | -                     | -                | -             | -                |
| 20,501 - 21,000 | 52                 | 1,078,403        | -                     | -                | 1             | 20,895           |

TABLE 4, continued

SUMMARY OF RETIRED MEMBER AND BENEFICIARY DATA  
BY LEVEL OF ANNUAL ALLOWANCE AS OF JUNE 30, 2003

ALL TEACHERS

| Allowance Level | Service Pensioners |                  | Disability Pensioners |                  | Beneficiaries |                  |
|-----------------|--------------------|------------------|-----------------------|------------------|---------------|------------------|
|                 | Number             | Annual Allowance | Number                | Annual Allowance | Number        | Annual Allowance |
| 21,001 - 21,500 | 57                 | 1,210,263        | 1                     | 21,436           | -             | -                |
| 21,501 - 22,000 | 25                 | 543,384          | -                     | -                | -             | -                |
| 22,001 - 22,500 | 36                 | 802,930          | -                     | -                | -             | -                |
| 22,501 - 23,000 | 39                 | 886,834          | -                     | -                | -             | -                |
| 23,001 - 23,500 | 41                 | 954,761          | -                     | -                | -             | -                |
| 23,501 - 24,000 | 30                 | 712,069          | -                     | -                | -             | -                |
| 24,001 - 24,500 | 30                 | 727,629          | 1                     | 24,401           | -             | -                |
| 24,501 - 25,000 | 33                 | 817,347          | -                     | -                | -             | -                |
| Over 25,000     | 217                | 6,476,907        | 2                     | 52,152           | 2             | 67,572           |
| Total           | 3,791              | \$ 47,167,331    | 118                   | \$ 1,344,759     | 260           | \$ 2,028,907     |

SCHEDULE E

AMORTIZATION SCHEDULE FOR THE UNFUNDED ACTUARIAL  
ACCRUED LIABILITY

AMORTIZATION SCHEDULE FOR THE UNFUNDED ACTUARIAL  
ACCRUED LIABILITY

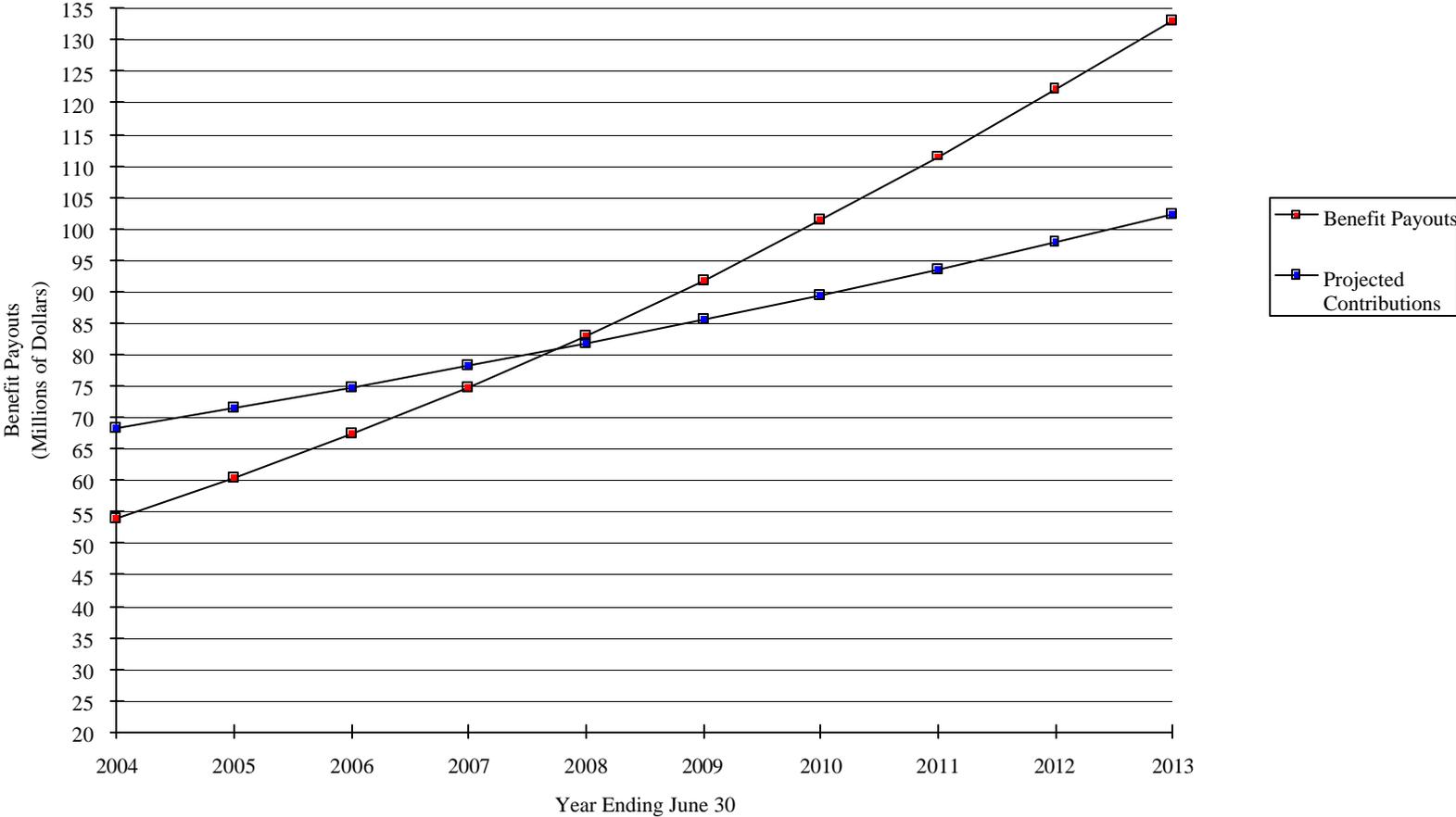
| Date      | Balance     | Contribution<br>(Year Following) |
|-----------|-------------|----------------------------------|
| 6/30/2003 | 140,821,352 | 11,795,554                       |
| 6/30/2004 | 139,828,760 | 12,385,332                       |
| 6/30/2005 | 138,143,845 | 13,004,599                       |
| 6/30/2006 | 135,680,576 | 13,654,829                       |
| 6/30/2007 | 132,344,507 | 14,337,570                       |
| 6/30/2008 | 128,032,027 | 15,054,449                       |
| 6/30/2009 | 122,629,546 | 15,807,171                       |
| 6/30/2010 | 116,012,615 | 16,597,530                       |
| 6/30/2011 | 108,044,964 | 17,427,407                       |
| 6/30/2012 | 98,577,467  | 18,298,777                       |
| 6/30/2013 | 87,447,016  | 19,213,716                       |
| 6/30/2014 | 74,475,297  | 20,174,402                       |
| 6/30/2015 | 59,467,466  | 21,183,122                       |
| 6/30/2016 | 42,210,716  | 22,242,278                       |
| 6/30/2017 | 22,472,719  | 23,354,392                       |
| 6/30/2018 | 0           | 0                                |

SCHEDULE F

PROJECTED BENEFIT PAYOUTS AND  
CONTRIBUTIONS FOR THE PERIOD  
JULY 1, 2003 THROUGH JUNE 30, 2013

**PROJECTED BENEFIT PAYOUTS AND CONTRIBUTIONS**

JULY 1, 2003 THROUGH JUNE 30, 2013



SCHEDULE G

PROJECTION OF CONTRIBUTIONS FOR FOLLOWING TWO FISCAL YEARS

**PROJECTION OF CONTRIBUTIONS FOR FOLLOWING TWO FISCAL YEARS**

On the basis of the June 30, 2003 actuarial valuation, the recommended contribution for the fiscal year ending June 30, 2004, is \$41,658,946, based on the following:

|                                |               |
|--------------------------------|---------------|
| Payroll                        | \$437,238,543 |
| Normal rate                    | 6.83%         |
| Accrued liability contribution | \$11,795,554  |

On this basis, the projected contributions for the following two fiscal years are as follows:

| Fiscal Year | Projected Payroll | Normal Rate | CONTRIBUTIONS |                   |              |
|-------------|-------------------|-------------|---------------|-------------------|--------------|
|             |                   |             | Normal        | Accrued Liability | Total        |
| 2005        | \$456,914,000     | 6.83%       | \$31,207,000  | \$12,385,332      | \$43,592,332 |
| 2006        | 477,475,000       | 6.83%       | 32,612,000    | 13,004,599        | 45,616,599   |

In these projections, we assumed that total payroll would increase by 4½% each year.